April 20, 2007 Vol. 46, No. 8

Spaceport News

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Atlantis receives target launch date, tank repairs

NASA is targeting June 8 as the next possible launch opportunity for Space Shuttle Atlantis' STS-117 mission to the International Space Station. The April 10 decision by agency management followed a meeting that reviewed the progress in repairing insulating foam on the shuttle's external fuel tank, which was damaged during a sudden hail storm Feb. 26 at Kennedy Space Center.

That damage required engineers to repair approximately 2,660 sites on the tank. Plans call for that tank, ET-124, to be used on the mission.

"If we continue at the pace of repair that we're doing, we should be looking at vehicle rollout to the launch pad, perhaps as early as May 6," said Wayne Hale, manager of the Space Shuttle Program.

The launch window extends from June 8 to July 18. "What we're doing is letting the work drive the schedule, not the other way around," Hale said.

The entire team agreed that adequate progress is being made on ET-124, as well as ET-117 which arrived in early April. Both would still be available, if necessary. "The work force has done an amazing job of assessing and repairing the tank so far, but the sheer volume of repairs dictates moving the launch target to June," Hale said.

Commander Rick Sturckow, Pilot Lee Archambault and Mission Specialists Jim Reilly, Patrick Forrester, Steven Swanson and Danny Olivas will continue training at Johnson Space Center. During the 11-day mission, the astronauts will work with the station crew and ground teams to install a new, girder-like truss segment, unfold a new set of solar arrays and retract one array on the starboard side of the station.

For more information about the STS-117 crew and mission, visit **http://www.nasa.gov/shuttle**.

IN THE Vehicle Assembly Building, United Space Alliance technicians Brenda Morris (left) and Brian Williams apply foam and molds on areas of Space Shuttle Atlantis' external tank damaged by hail.

NASA work force prepares for OSHA VPP recertification visit

By Linda Herridge
Staff Writer

NASA employees at Kennedy Space Center are gearing up for a visit from Occupational Safety and Health Administration inspectors in May to re-evaluate the NASA's safety and health programs for recertification as a Star Site in the Voluntary Protection Program, or VPP. Three years ago, NASA's safety and health program at KSC achieved certification as a Star Site from the federal agency that oversees safety and health practices.

The Institutional Safety Branch of the Safety and Mission Assurance Directorate is leading the effort to ensure that the center's safety and health program is still robust and meets all of OSHA's requirements.

"The preparation activities for the May 21-25 VPP evaluation are progressing nicely," said David Facemire, project manager for the recertification. "We'll be ready to go once OSHA arrives at the center."

The safety branch re-established the VPP Steering Committee and 19 VPP element teams to help prepare the center's civil servant work force for OSHA's visit. Members of the steering committee are the deputy directors from each directorate, led by Safety and Mission Assurance Deputy Director Bert Garrido.

(See VPP, Page 7)

THE VOLUNTARY Protection Program Star Site flag greets employees at the guard gates. The Occupational Safety and Health Administration will visit the center May 21-25 for a VPP evaluation.

Director's Update

By Tip Talone Constellation Project Office Director

The basis of the Constellation Program is leveraging proven Space Shuttle Program facilities and systems, where applicable, and incorporating successful design and operations concepts from Apollo. This combination is rooted in history and experience, and this solid foundation ensures a high confidence for success within a reasonable schedule.

As NASA's Constellation Program begins building the first of the new generation of spacecraft to explore our solar system, launch infrastructure and the support of systems development are also under way at Kennedy Space Center. Converting facilities at Launch Complex-39 for the first test flight of the Ares I begins the long-term process for providing facilities and capabilities for both the crew and cargo launch systems.

To most effectively and efficiently achieve this monumental undertaking, KSC has employed a strategy to utilize existing skills and expertise from virtually every organization across the center. Under the overall leadership of the Constellation Project Office, the center's Launch Vehicle Processing Directorate will provide design and modifications to Mobile Launch Platform-1, Vehicle Assembly Building High Bay 3 and Launch Pad B, and perform the ground operations and launch of the highly anticipated test flight in the spring of 2009.

The required modifications will take place after the Hubble Space Telescope repair mission, currently scheduled for next year.

The KSC Engineering Directorate has been tasked by the Constellation Project Office to provide the construction and modification designs to implement the Constellation Program/KSC Project's concepts of operations in support of the International Space Station, lunar and Mars missions. Initially, required capabilities will include High Bay 3, Firing Room 1, Launch Pad 39B and the new mobile launcher for the Crew Launch Vehicle and Crew Exploration Vehicle missions to the space station.

Design of the new mobile launcher is under way, and requests for proposals for the design of the required new state-of-the-art lightning protection system and crew escape system at Pad B have been released.

Detailed preliminary studies are under way within the Constellation Project Office and the Engineering Directorate for subsequent facilities, systems and ground support equipment to support the final integrated crew and cargo flight systems, with the first test flight of the Ares I vehicle no later than 2012.

Work is also under way in historic Firing Room 1 to transition from the space shuttle test and launch configuration to initially support the demonstration flight in 2009, then full implementation to support all subsequent launches of the Crew Launch Vehicle and Crew Exploration Vehicle. A new KSC-designed Command Control System will replace the existing Launch Processing System for test and launch management/control.

"Initially, required capabilities will include High Bay 3, Firing Room 1, Launch Pad 39B and the new mobile launcher."

With the addition of a second converted firing room, the test and launch team will have the necessary command and control capability to execute the aggressive lunar and Mars launch campaigns.

In addition to their continuing role in providing operational program systems engineering for the Space Shuttle, Launch Services and International Space Station programs, the Engineering Directorate will provide systems engineering oversight for the construction and validation of the new and modified facilities and ground systems for the Constellation Program.

Each project of the Constellation Program, including the Crew Exploration Vehicle, the Crew Launch Vehicle, Mission Operations, Extravehicular Activities and Ground Operations, have been defining/refining their system requirements through the Program System Requirements Review process, which will culminate in a Program Baseline Synchronization in May to reconcile requirements across the program and projects.

The KSC Ground Operations System Requirements Review will finish with a final board the last week in April, chaired by the Constellation Project manager. Key members on this board include the Constellation Program manager, each of the Constellation Project managers, and KSC organization leaders who are directly engaged in the implementation of the Constellation Project.

Included at KSC, but not managed by the center, is the Orion (Crew Exploration Vehicle) Project's facility within the newly renovated Operations and Checkout Building High Bay.

Lockheed Martin, the prime contractor for the vehicle, will use the facility to complete final assembly and testing of the Orion crew capsules and service modules, with the first KSC test flight planned for no later than 2013.

As we move forward with the Vision for Space Exploration, our work force has much to be proud of and look forward to as Kennedy Space Center fulfills its role as the lead NASA center for the launches of the Constellation Program.

NASA, contractors visit legislators in Tallahassee

More than 50 NASA and contractor representatives visited Tallahassee last month during Florida Space Day 2007 to meet with legislators and discuss the importance of space-related investments and other support from the state government. The group, including Kennedy Space Center Director Bill Parsons (pictured sixth from left), divided into 11 teams to efficiently deliver the message to as many legislators as possible during the event. More than 130 legislators were contacted. Twenty-two legislators and staff personnel attended the reception following the day of lobbying, the largest ever at a Florida Space Day reception.

Higginbotham proud of family, payload processing team

By Cheryl Mansfield
Staff Writer

You don't have to spend a long time talking to Scott Higginbotham before you realize that this man loves his job. His enthusiasm is still evident, even after 15 years as a mission manager whose team prepares payloads to fly aboard the space shuttle.

"One of the special things about this job is that you get to see all these people come together to build some really cool spacecraft, and then you get to see them launched," he said with unabashed excitement.

"I did that as a little kid with toys and now I'm doing it for real. This is not just a job, it's a continuation of the fun I had as a kid. I've been really blessed. It's nice to have a job that's fun."

But that enthusiasm might seem to belie the huge responsibility of the work he orchestrates, backed up by two engineering degrees and some people skills that can't be taught. When dealing with the multi-national cooperative effort of building the International Space Station, all of these skills and talents must come into play.

As a mission manager for a vast array of components destined for the station, Higginbotham leads a highly trained team of engineers, technicians and quality inspectors who assemble and test station hardware at the center before it is launched aboard the shuttle.

"I get to work with an incredible bunch of people," he said. "I don't know that we have anywhere in this country a better collection of interesting and talented people than we do here."

Maybe Higginbotham's greatest joy comes from seeing those components reach space. "Launch day is the culmination of everything you've been working for, and to finally see that vehicle lift off the pad and take your spacecraft up where it belongs, it's almost indescribable."

But as exciting as the launch can be, it's what comes next that gives him the most satisfaction. "The best part is when I go home after launch, and I'm exhausted, drained," he said.

"And I sit down on the couch, I turn on NASA Television — and usually the timing's about right — when the payload bay doors come open, and there it is: that spacecraft I helped build, and it's now circling the Earth at 17,500 miles an hour. That's so incredibly cool."

The international aspect of the space station work has taken him to Japan four times, since his assigned missions include all of the components that will make up the Kibo (Hope) module, the Japanese contribution to the station.

SCOTT HIGGINBOTHAM has been a mission manager for space station components for more than 15 years.

The learning experience of working with Japan and other international partner nations has helped shape what he feels is the groundwork for the future cooperative efforts in space exploration.

"What we're doing here now on the station, not only are we building this marvelous research facility, but we're also learning and setting the stage for how we can work together on manned spaceflight projects for the future," he said.

"Hopefully, what we've learned from the station will make the next big program even better."

But Higginbotham is quick to point out that as much as he loves his job, it comes second to his devotion to his family. That balance is made a little easier since his wife, who he describes as his best friend, works just down the hall and has shared mission assignments with him.

"I have two passions in my life. One is my family, and the second is my work. And so I'm really blessed in that regard, because I have the best of both worlds."

Given these dual passions, it's not hard to imagine that his best bragging rights come from the moments when he can point to the TV during live mission coverage and say to his kids, "Daddy helped build that!"

Quinn, Brooks inducted into Space Technology Hall of Fame

By Amber Philman
Managing Editor

Two NASA Kennedy Space Center employees are new inductees into the Space Technology Hall of Fame for their award-winning work in developing technology that reduces groundwater contamination. The ceremony took place during the 23rd National Space Symposium held April 9 to 12 in Colorado Springs.

The inductees include Dr. Jacqueline Quinn, a NASA environmental engineer in the Applied Sciences Division at KSC, and Kathleen Brooks, a NASA analytical chemist in KSC's Materials Science Laboratory. They will be joined by Drs. Christian Clausen, Cherie Geiger and Debra Reinhart from the University of Central Florida's Departments of Chemistry and Civil and Environmental Engineering, who helped to develop Emulsified Zero-Valent Iron, or EZVI.

"It was an unexpected honor to

(See HALL OF FAME, Page 6)

KATHLEEN BROOKS (left), a NASA analytical chemist in KSC's Materials Science Laboratory, and Dr. Jacqueline Quinn, a NASA environmental engineer in the Applied Sciences Division at KSC are members of the Space Technology Hall of Fame for their work in the development of a technology to reduce groundwater contamination.

‘Star Trek’ actor presents powerful message at Biannual Diversity Event

By Jennifer Wolfinger
Staff Writer

Actor George Takei pretended to travel in space as Mr. Sulu on the original “Star Trek” television and film series, but he made a very real voyage to the Kennedy Space Center on April 9 as the 2007 Biannual Diversity Event’s guest speaker.

“We’re hoping to reach a broader audience with a very important message about the value of diversity here and what it means to the KSC work force,” said Diversity and Equal Opportunity Manager Tara Gillam to welcome the employees who filled the Training Auditorium for the event.

Diversity Program Manager Cindy Gooden introduced Takei, explaining how he lived through a difficult period when Asian Americans were publicly listed as aliens who were ineligible for citizenship.

“We’re here to celebrate diversity, appreciating the differing viewpoints, the ideas and perspectives — all the life events we bring to our professions,” Gooden said.

Takei began by describing KSC’s work as awe inspiring and mind boggling. He shared how Star Trek has many connections to NASA, including the cast’s attendance at the first space shuttle rollout and the massive and successful campaign by the show’s fans to have the vehicle named Enterprise after the Star Trek spacecraft.

He also recognized the global participation of the International Space Station, and felt Star Trek similarly served as a showcase of diversity through its crew’s ethnicities, accents and languages.

“You saw diversity richly and vibrantly portrayed on Star Trek. We had, as a core value, this notion of IDIC, the acronym for ‘infinite diversity in infinite combinations,’ ” he said.

Following the Pearl Harbor attack, the young Takei overcame being imprisoned with his family and other Asian Americans by the U.S. military. There was a prevailing climate of racial prejudice against Asian Americans at that time.

Once released, he endured the harsh treatment of a prejudicial teacher.

Because of his father’s prodding, Takei eventually became active in politics, which appeals to his theatrical side. He explained that democracy is great, but it’s as fallible as its people. For example, while he’s free of the internment camp’s barbed wire, Takei now sees a metaphorical barricade surrounding gay, lesbian, bisexual and transgender people.

GEORGE TAKEI, who portrayed Mr. Sulu on the “Star Trek” television and film series, talks to the work force at the 2007 Biannual Diversity Event held April 9 in the Training Auditorium. He admires the global participation in the International Space Station program.

Center Director Bill Parsons presented Takei with a shuttle figurine and thanked him for his powerful message. “He reminded me, and I think he reminded you, that as far as we’ve come, we’ve still got a long way to go,” Parsons said.

To view the event, visit **http://portal.ksc.nasa.gov/portal/**.

DISCOVERY FLOW Director Stephanie Stilson talks to George Takei in Orbiter Processing Facility bay 3 about the work currently being performed on the orbiter. Takei toured some facilities after his presentation at the 2007 Biannual Diversity Event.

RUSSELL ROMANELLA (right), director of International Space Station and Payload Processing, talks to George Takei about some of the modules inside the Space Station Processing Facility.

GEORGE TAKEI (right) looks around inside the Space Shuttle Atlantis. The “Star Trek” actor visited the center to talk to the work force at the 2007 Biannual Diversity Event.

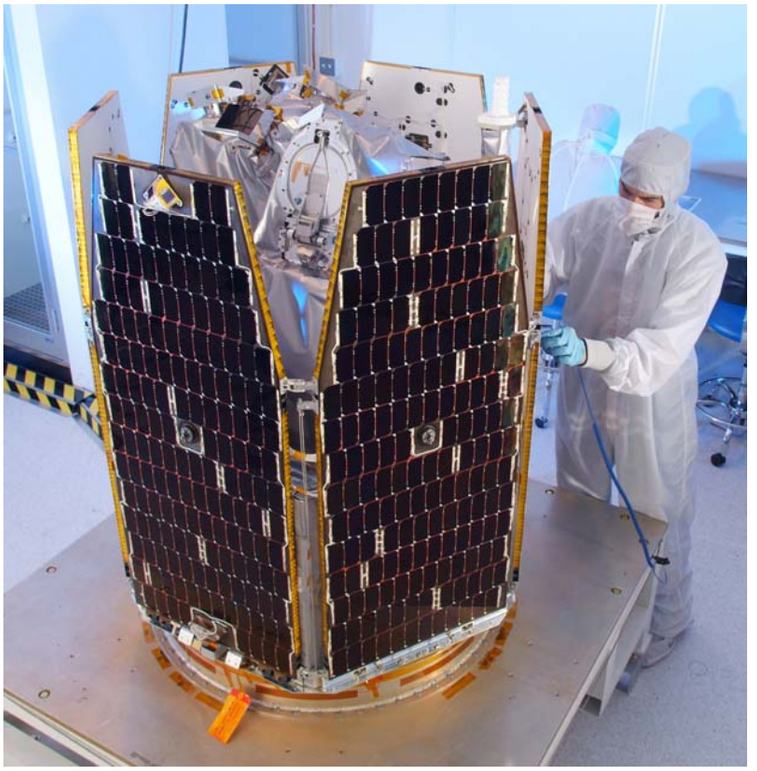
NASA's AIM to study why ice clouds form

NASA is preparing to launch the Aeronomy of Ice in the Mesosphere spacecraft, also known as AIM, on the first mission dedicated to exploring mysterious ice clouds that dot the edge of space in Earth's polar regions. These clouds have grown brighter and more prevalent in recent years and some scientists suggest that changes in these clouds may be the result of climate change.

The first opportunity for launch is on Wednesday, April 25, from Vandenberg Air Force Base, Calif., aboard a Pegasus launch vehicle.

AIM will conduct the first detailed probe of this unusual phenomenon typically observed approximately 50 miles above the Earth's surface in the mesosphere, the region just above the stratosphere. Researchers know very little about how these polar mesospheric clouds form, why they are being seen at lower latitudes than ever before, or why they have recently grown brighter and more frequent.

"These clouds are indicators of conditions in the upper reaches of the Earth's atmosphere, and are an important link in the chain of processes that results in the deposition of solar energy into Earth's atmosphere," said Mary Mellott, an AIM program scientist at NASA Headquarters, Washington.



THE AIM spacecraft is shown with its solar arrays stowed.

"AIM will provide an understanding of how and why these clouds form, an important contribution toward the NASA goals of understanding the fundamental physical processes of our space environment and how the habitability of planets is affected by the interaction of planetary magnetic fields and atmospheres with solar variability."

The clouds are noctilucent, meaning they can be seen from the ground only at night, when they are illuminated by sunlight no longer visible from the Earth's surface. The brightest of these clouds are now known to be primarily composed of water ice.

Their seasonal life cycle is controlled by complex interactions between temperature, water vapor, solar activity, atmospheric chemistry and small particles on which the cloud crystals form. Human-induced factors such as carbon dioxide cause a warming in the lower atmosphere but a cooling in the mesosphere.

The clouds form in the coldest part of the Earth's atmosphere at the summer season in the polar regions. In the northern hemisphere, they begin appearing in mid-May and last through mid-August, in the southern hemisphere beginning mid-November and lasting through mid-March.

AIM will be comprised of three instruments: the Solar Occultation for Ice Experiment; the Cloud Imaging and Particle Size Experiment; and the Cosmic Dust Experiment. The satellite will simultaneously measure air pressure and temperature, moisture content and cloud dimensions, providing data needed to determine the role of polar mesospheric clouds as an important indicator of the planet's changing climate.

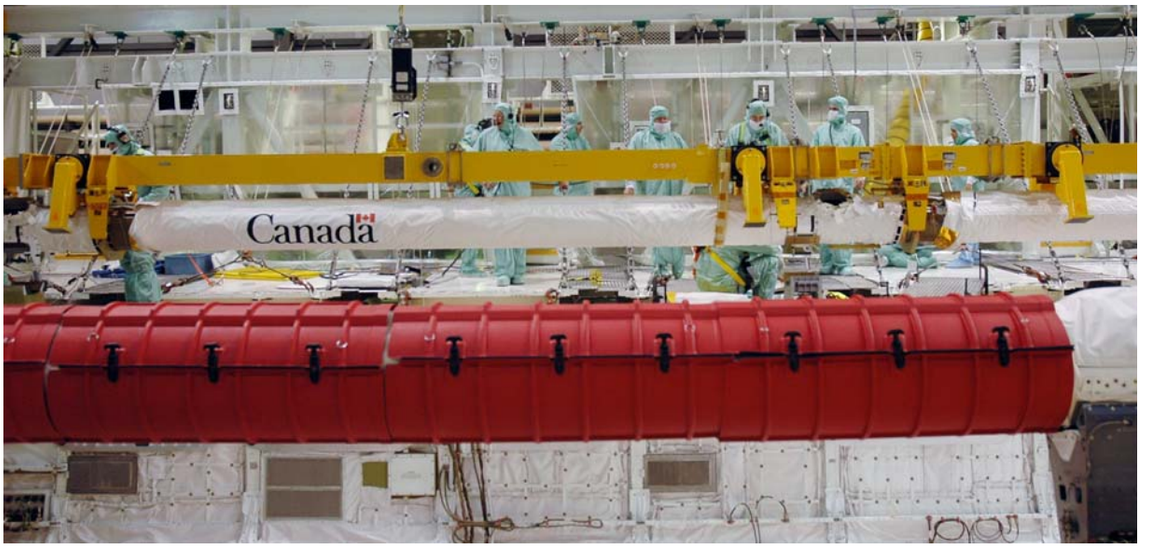
The clouds appear to be a relatively recent phenomenon, first reported in the late 19th century shortly after the volcanic eruption on the Indonesian island of Krakatoa. The first daytime observations of the clouds were made by satellite in 1969.

Regular space-based observations began in 1982 with NASA's Solar Mesosphere Explorer using instruments primarily designed for other purposes.

Endeavour receives boom sensor system

In Orbiter Processing Facility bay 2, the orbiter boom sensor system is lowered into the open payload bay of Space Shuttle Endeavour. The boom will be installed in the payload bay for launch.

The orbiter is scheduled to fly on mission STS-118 to the International Space Station this summer. The mission will be Endeavour's first launch in more than four years. The orbiter received all of the safety upgrades added to both Discovery and Atlantis. The STS-118 mission will deliver the third starboard truss segment, S5, to the station.



Kennedy employees gain software engineering insight

By Jennifer Wolfinger
Staff Writer

The NASA Engineering and Safety Center Academy recently provided a learning opportunity for a group of Kennedy Space Center engineers during its course, "Software as an Engineering Discipline: Learning From the Past and Looking to the Future."

The course, which was located at George Mason University in Fairfax, Va., took place March 13 to 15. It included a history of software's evolution in the space program, lessons learned from past software failures and insight into newer programs.

Class activities also included viewing a documentary showcasing the software applications used in designing and manufacturing a Boeing aircraft, and a discussion among seven guest speakers and students.

The academy's discipline expert Michael Aguilar led the course. One of his projects at Goddard Space Flight Center has been developing test science instrument software for the futuristic James Webb Space Telescope.

"Other engineering disciplines, such as mechanical and electrical, are considered mature. Software engineering has grown, but is still considered a young discipline," said computer engineer and class participant Brenda Penn of the Engineering Directorate. "The best aspect of the course was that it was presented with NASA's unique culture in mind, so that the student was able to see how the concepts can be applied to their work."

Susan Sitko, an aerospace technologist in the Engineering Directorate, said the course will help with NASA's future goals.

"The course content was focused more on lessons learned in the software engineering area over the history of the space program and aerospace industry," Sitko said. "I think it applied mostly to our preparations for the upcoming Constellation Program."

BRENDA PENN (left) and Susan Sitko of the Engineering Directorate recently attended the NASA Engineering and Safety Center Academy.

The academy was established to capture, share and preserve the lifetimes of experience and knowledge of NASA's senior scientists and engineers. Other goals of the academy include guiding the next generation of NASA scientists and engineers as they develop expertise in technical problem solving, and fostering interest in NASA careers.

For more information, visit **www.nescacademy.org**.

HALL OF FAME . . .

(Continued from Page 3)

be recognized by such a prestigious institution as the Space Foundation," which conducts the Hall of Fame in cooperation with NASA Quinn said.

"While the direct applications to spaceflight are not obvious, this technology will have a direct benefit as we transition from current spaceflight programs to new programs supporting the exploration of the moon and beyond. This offers an innovative way of cleaning up our current facilities and enabling us to use them for the future."

The EZVI technology won NASA's Government Invention of the Year and Commercial Invention of the Year for 2005. KSC inventors have accomplished this feat twice in the past three years.

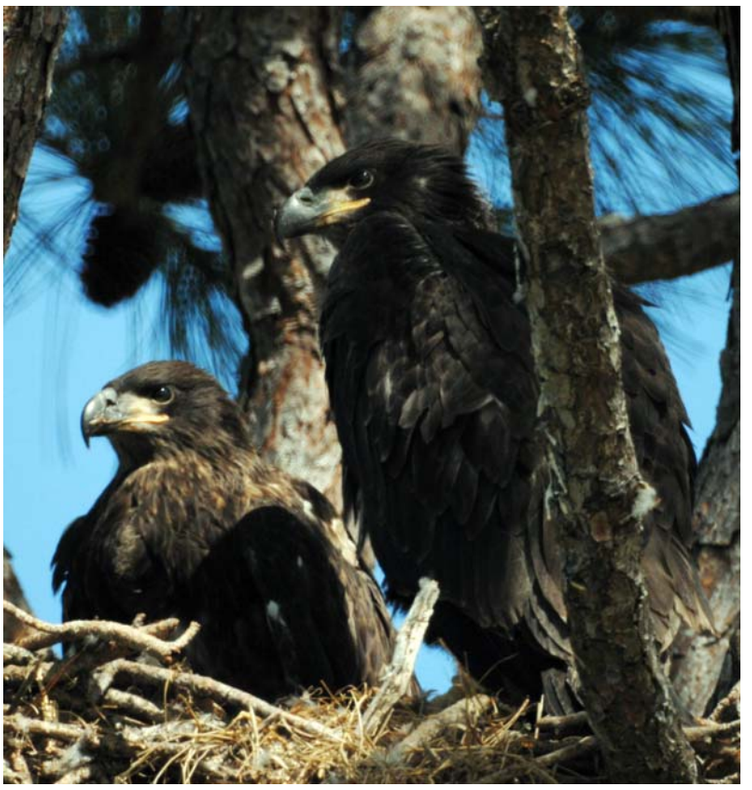
The group also received a 2006 Award for Excellence in Technology Transfer from the Federal Laboratory Consortium for Technology Transfer. This award recognizes laboratory employees who have accomplished outstanding work in the process of transferring a technology developed by a federal laboratory to the commercial marketplace.

EZVI is one of the few methods available that can treat the dense nonaqueous phase liquids, or DNAPL source. DNAPLs are liquids that are denser than water and do not dissolve or mix easily in water. Benefits of this technology include requiring less treatment time, reducing treatment costs and producing less toxic and more easily degradable byproducts.

Quinn teamed with researchers at UCF in 2000 to conduct the first phase of the research and development of EZVI. During phase two, the first field demonstration was performed in 2002 at Launch Complex 34.

GeoSyntec, an environmental consultant to NASA, participated in the first field demonstration of EZVI as the university's small business collaborator. Since then, NASA has licensed EZVI to six companies that are producing their own versions of the technology.

New eagles nest at north end



TWO FLEDGLING eagles bear the regal look of their parents as they rest in their nest at the north end of S.R. 3 near Kennedy Space Center. This year-old nest is one of a dozen eagle nests both at KSC and in the Merritt Island National Wildlife Refuge, which surrounds KSC.

Remembering Our Heritage

35 years ago: First Soviet dignitary finds Apollo 16 experience pure 'poetry'

by Kay Grinter
Reference Librarian

The Apollo lunar landing program was drawing to a close in 1972 when the Apollo 16 mission launched on April 16. It was the fifth and next-to-last moon mission still on the schedule.

Vice President Spiro T. Agnew was among the dignitaries at a viewing site on Kennedy Space Center to witness the awe-inspiring liftoff of the Saturn V at 12:54 p.m. EDT from Pad 39A.

Poet Yevgeny Yevtushenko was also in attendance, the first Soviet dignitary to accept NASA's invitation to view an Apollo launch. A political activist, he may be best known in the West for his poem "Babi Yar," which exposed the Soviet concealment of the massacre of the Jewish population of Kiev in September 1941.

In response to questions from reporters following launch, Yevtushenko aptly replied, "It was beautiful; it was poetry." His midnight visit to the floodlit launch pad was a profound experience, as well. "It's really a beautiful show, this white, tender body of a rocket, supported by the clumsy but sometimes tender hands of the red gantry tower. I absolutely had the feeling of one big brother embracing his sister before a long way, a long road. It was wonderful."

Commander John Young, Command Module Pilot Thomas Mattingly II and Lunar Module Pilot Charles Duke Jr. made up the crew. It was the second trip to the moon for Young and his fourth spaceflight. On Apollo 10, the lunar module descended to within nine miles of the moon's surface during a dress rehearsal for the landings. Mattingly and Duke were both rookies, although Mattingly would have been command module pilot on Apollo 13 had he not been exposed to the German measles.

THE APOLLO 16 Saturn V spacecraft underwent the fueled portion of the week-long Countdown Demonstration Test (left) to verify all equipment worked properly.

Below, Apollo 16 astronauts John Young (right) and Charles Duke Jr. maneuver a training version of the lunar roving vehicle on a field at the Kennedy Space Center.

At the moon, Mattingly operated a complex array of scientific instruments aboard the command and service module "Casper" as Young and Duke explored the Descartes region from the lunar module "Orion." The astronauts each logged more than 20 hours of extravehicular activity, or EVA — a new record. With the aid of a lunar rover, they collected nearly 213 pounds of rock and soil samples. Mattingly also set a record for the longest in-flight EVA from a command module when he retrieved the film cassettes from the panoramic and mapping cameras.

The USS Ticonderoga recovered the Apollo 16 crew following splashdown in the Pacific Ocean on April 27. Although this was the only spaceflight for Duke, who retired at the conclusion of the Apollo Program, both Young and Mattingly remained in the astronaut corps and went on to command space shuttle missions.

VPP . . .

(Continued from Page 1)

"Achieving VPP recertification shows the center director's and other senior management's commitment to safety and health," Garrido said. "It will strengthen our partnership with OSHA to reduce occupational injuries and illnesses."

During the recertification process, 13 OSHA inspectors will visit various work sites at the center and interview up to 10 percent of the civil servant work force. Inspectors will review the status of 19 required elements. These include management commitment and planning, accountability, the disciplinary program, injury rates, employee participation, the self-inspection program, the employee hazard reporting system, mishap/incident investigation, and job hazard analysis/process review. Also to be reviewed are safety and health training, preventive maintenance, emergency programs and drills, health programs, personal protective equipment, safety and health staff involved with change, contractor safety, and the center's medical program and resources.

Center Director Bill Parsons said the VPP is a special partnership between NASA and OSHA and will enhance safety programs, as well as allow OSHA to benefit from the center's participation.

Parsons said he has participated in OSHA's VPP at various NASA centers since the agency began taking part in the program. "I am convinced that (the program) is worthy of the investment of our time and energy," he said. "I continue to be proud of KSC's involvement in the program."

Other KSC VPP Star Sites include contractors Space Gateway Support, United Space Alliance and Boeing. At least 78 percent of the work force is now covered by VPP Star-certified safety and health programs.

More than 1,500 molds available at KARS Ceramic Club

The KARS Ceramic Club invites new members to join and enjoy making beautiful ceramic and porcelain items that can be wonderful gifts to friends and family. The ceramic group owns more than 1,500 molds with a completed sample of each mold to view, including Santa Claus, space shuttles, sleighs, reindeer, tea sets for grown-ups and children, angels, nativity scenes, complete dinnerware sets, taco holders and much more.

The KARS Ceramics Club facilities are available to employees and their families at KSC, including contractors. The club has three kilns that provide free firing. All it takes to join is a KARS Card purchased from the Exchange Stores or the Country Store at KARS I, along with yearly dues to the KARS Ceramic Club. The club meets the first Thursday of each month at the Ceramic Club at KARS I beginning at 6:30 p.m. Call Geri Bloomquist at 783-0403 or La Verne Woodard at 452-1068 to receive an application form or for more information.

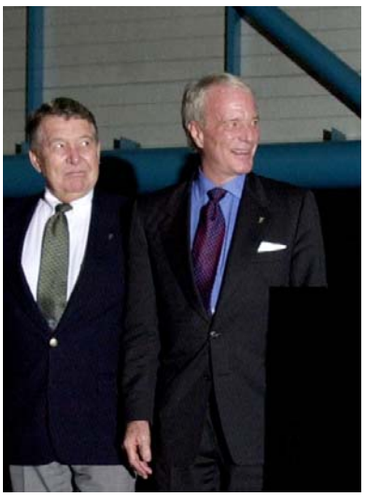
First astronaut autograph show at Visitor Complex in June

A unique opportunity to meet NASA legends will take place June 8 and 9 at the Kennedy Space Center Visitor Complex, with more than 20 astronauts and other space program luminaries gathering for the first astronaut autograph show to visit Florida.

The Sims and Hankow Astronaut Autograph Show, which travels to a different city every year, will provide showgoers with astronaut autograph sessions, photo opportunities, astronaut lectures, a formal banquet and a silent auction of astronaut-donated memorabilia and experiences to benefit the non-profit Astronaut Scholarship Foundation. The event also will include artifact appraisals, door prizes and more.

Astronauts scheduled to attend include Wally Schirra, Mercury, Gemini 6 and Apollo 7 astronaut; Scott Carpenter, Mercury astronaut; Gene Cernan, Gemini 9 and Apollo 10 and 17 moonwalker; Buzz Aldrin, Apollo 11 moonwalker; Alan Bean, Apollo 12 moonwalker; Edgar Mitchell, Apollo 14 moonwalker; Charles Duke, Apollo 16 moonwalker; Walt Cunningham, Apollo 7 astronaut; Rusty Schweickart, Apollo 9 astronaut; Richard Gordon, Gemini 11 and Apollo 12 astronaut; Al Worden, Apollo 15 astronaut; Paul Weitz, Skylab 1 mission specialist; Jack Lousma, Skylab 2 mission specialist; Ed Gibson, Skylab 3 mission specialist; Robert "Hoot" Gibson, STS-41-B, 61-C, 27, 47 and 71 shuttle astronaut; Jon McBride, STS-41G shuttle astronaut; Tom Jones, STS-59, 68, 80 and 98 shuttle astronaut; and Brian Binnie, SpaceShipOne pilot.

Space program luminaries in attendance will include Eugene Kranz, former NASA flight director; Guenter Wendt, pad leader; Sy Liebergot, Apollo 13 flight controller; Dee O'Hara, Mercury nurse and America's first aerospace nurse; Jim Lewis, recovery pilot for Gus Grissom's Liberty Bell 7; and Bill Dana (also known as Jose Jimenez), the "eighth Mercury astronaut" comedian.



AT LEFT, Wally Schirra and Scott Carpenter (right), and Buzz Aldrin (above) will participate in the Astronaut Autograph Show.

Single-day tickets are $10 more than the Visitor Complex's regular admission price. Weekend packages are also available. Astronaut autographs cost an additional fee. To purchase tickets, visit **www.autographshows.net** or call 936-444-3375.

U.S. Astronaut Hall of Fame to welcome sixth group of shuttle astronauts

Michael Coats, Steven Hawley and Jeffrey Hoffman will join such American space heroes as Neil Armstrong, John Glenn and John Young in the U.S. Astronaut Hall of Fame when they are enshrined during a public ceremony at the Kennedy Space Center Visitor Complex on May 5. This is the sixth group of space shuttle astronauts named to the Hall of Fame.

Earlier inductees represent the Mercury, Gemini, Apollo, Skylab and Apollo-Soyuz programs. The addition of these inspiring men — Coats, director of Johnson Space Center; Hawley, who helped deploy the Hubble Space Telescope; and Hoffman, the first astronaut to log 1,000 hours aboard the shuttle — will bring the number of space explorers enshrined in the Hall of Fame to 66.

The inductees were selected by a committee of current Hall of Fame astronauts, former NASA officials and flight directors, historians, journalists and other space authorities in a process administered by the Astronaut Scholarship Foundation. To be eligible, an astronaut must have made his or her first flight at least 17 years before the induction year and must be retired from NASA's astronaut corps for at least five years.

Candidates must be U.S. citizens trained by NASA and must have orbited the Earth at least once.

National Day of Prayer is May 3

The Kennedy Space Center will mark this year's National Day of Prayer with an observance in the KSC Training Auditorium from 11 a.m. to noon on May 3. Those who would like to participate or assist in any way should contact Ed Markowski at 867-0829 or *Edward.M.Markowski@nasa.gov*.

Spaceport News is available on the Web

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John F. Kennedy Space Center

Spaceport News

Spaceport News is an official publication of the Kennedy Space Center and is published on alternate Fridays by External Relations in the interest of KSC civil service and contractor employees.

Contributions are welcome and should be submitted two weeks before publication to the Media Services Branch, IDI-011. E-mail submissions can be sent to *Jeffery.Stuckey-1@ksc.nasa.gov.*

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Editorial support provided by InDyne, Inc. Writers Group.
NASA at KSC is located on the Internet at http://www.nasa.gov/centers/kennedy
USGPO: 733-049/600131